

Date: Sat, 9 Jan 93 19:36:17 PST
From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>
Errors-To: Info-Hams-Errors@UCSD.Edu
Reply-To: Info-Hams@UCSD.Edu
Precedence: Bulk
Subject: Info-Hams Digest V93 #43
To: Info-Hams

Info-Hams Digest Sat, 9 Jan 93 Volume 93 : Issue 43

Today's Topics:

(none)

* SpaceNews 11-Jan-93 *

1200Mhz is not a microwave band?

Any Icom IC-3230 owners out there?

CTCSS close

Daily Solar Geophysical Data Broadcast for 08 January

Undeliverable Messages

VK2SG RTTY DX Notes for week ending 8 January, 1993 (BID RTDX0108)

Who posts RSGB News?

Yaesu FT-5100 Help

Yaesu FT-990 mods, etc.

YX0AI

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu>

Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu>

Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: 9 Jan 93 20:45:00 GMT
From: news-mail-gateway@ucsd.edu
Subject: (none)
To: info-hams@ucsd.edu

PLEASE NOTE YOUR MAILER IS PUTTING VERY LARGE DUPLICATE MESSAGES INTO THE
ALT.RADIO.AMATEUR NEWSGROUP. THIS IS VERY ANNOYING FOR THOSE OF US WHO HAVE
TO PAY TO RECEIVE THIS NEWSGROUP, LIKE MYSELF. PLEASE DESIST.

To say I was pissed off would be a great understatement.

FIRST MESSAGE:

=====

***** UNDELIVERABLE MAIL sent to sbooth, being returned by lonestar!sbooth

mail: Error # 2 'Problem with mailfile' encountered on system lonestar

Received: from ucsd.edu by lonestar.utsa.edu via SMTP (920330.SGI/920502.SGI)
for sbooth id AA10326; Thu, 7 Jan 93 20:04:42 -0600

Received: by ucsd.edu; id AA12636
sendmail 5.67/UCSD-2.2-sun
Thu, 7 Jan 93 16:06:50 -0800

Received: by ucsd.edu; id AA12577
sendmail 5.67/UCSD-2.2-sun
Thu, 7 Jan 93 16:06:22 -0800 for /usr/lib/sendmail -oc -odb
-oQ/var/spool/lqueue -oi -finfo-hams-relay info-hams-list

Message-Id: <9301080006.AA12577@ucsd.edu>

Date: Thu, 7 Jan 93 16:06:20 PST

From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>

Errors-To: Info-Hams-Errors@UCSD.Edu

Reply-To: Info-Hams@UCSD.Edu

Precedence: Bulk

Subject: Info-Hams Digest V93 #34

To: Info-Hams@UCSD.EDU

SECOND MESSAGE:

=====

Returned Mail: User mail.txt@ccmail.orst.edu Unknown

*** Returned Mail Message Follows: ***

csd.edu by cerridwen.UCS.ORST.EDU with SMTP id AA22163
(5.67a/IDA-1.5 for <olsenm@ccmail.orst.edu>); Thu, 7 Jan 1993 17:38:30
-0800

Received: by ucsd.edu; id AA12636
sendmail 5.67/UCSD-2.2-sun
Thu, 7 Jan 93 16:06:50 -0800

Received: by ucsd.edu; id AA12577
sendmail 5.67/UCSD-2.2-sun
Thu, 7 Jan 93 16:06:22 -0800 for /usr/lib/sendmail -oc -odb
-oQ/var/spool/lqueue -oi -finfo-hams-re

Message-Id: <9301080006.AA12577@ucsd.edu>

Date: Thu, 7 Jan 93 16:06:20 PST

From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>

Errors-To: Info-Hams-Errors@UCSD.Edu

THIRD MESSAGE:

=====

The following message was not delivered because of
the following error:

-0852-Message error - invalid character

----- Original Message -----

Date: 9 Jan 93 00:37:03 GMT
From: news-mail-gateway@ucsd.edu
Subject: * SpaceNews 11-Jan-93 *
To: info-hams@ucsd.edu

SB NEWS @ AMSAT \$SPC0111
* SpaceNews 11-Jan-93 *

Bulletin ID: \$SPC0111

=====
SpaceNews
=====

MONDAY JANUARY 11, 1993

SpaceNews originates at KD2BD in Wall Township, New Jersey, USA. It
is published every week and is made available for unlimited distribution.

* NEWS FROM SPACE *

=====

Our friends on Space Station Mir send the following greetings to everyone:

HELLO FROM MIR-STATION !!!

WE WILL WORKING ON THE ORBIT UNTIL 1 FEBRUARY NEXT YEAR /1993/
AND WE ARE VERY HAPPY TO MEET YOU AGAIN !

73 ANATOLY & SERGEY

*
***** Happy NEW YEAR 1993 !!!

***** With best wishes
I Crew #12 of Space Station MIR:
flight commander - Anatoly Solovyev [U6MIR];
flight engineer - Sergey Avdeyev [RV3DW on the Earth].

73 PMS U6MIR-1 Anatoly & Sergey

[Downloaded from Mir by N6JLH and N8DEU]

* K0-23 OPERATIONS REPORT *

=====

Report dated 06-Jan-93:

1. General

Last week, the DSPE was ON to test its voice broadcast scheduler. After the test, the OBC186 had to reload its S/W because it didn't have enough memory for other tasks. During the loading procedure, the loader S/W loses some memory space possibly due to Single Event Upsets.

The K0-23 control station apologizes for postponing uplink until today. As its initial check out phase was ending, the controllers will open the uplink to all amateurs in the world on 15-Jan-93. This decision was made to share its responsibility as AMSAT in this week's groundstation meeting held on 4th of January.

Although the on-board S/W is unstable sometimes, we hope K0-23 could relieve some of the load of other PACSATs. On 15-Jan-93, K0-23 will broadcast its opening message on its downlink using its DSPE payload.

2. EIS

The EIS will start taking pictures again this week, as users explore the capability of the high resolution Earth imaging camera.

3. DSPE

The voice broadcast scheduler was tested during the last few weeks and it was successful. PCM voice data sampled at 8KHz is processed (filtering and compression) on a PC and coded using the DSPE data format. This voice file is then transmitted to DSPE on K0-23, then the OBC186 transmits the voice file to the DSPE at the scheduled time. The DSPE decompresses its data and sends it to downlink transmitter.

4. CRE

The CRE continues collecting data.

[Info via G7LAZ at HL0ENJ]

* F0-20 STATUS *

=====

The latest Mode JA analog transponder schedule from Kazu Sakamoto, JJ1WTK, at F0-20 mission control is as follows:

09-Jan-93 00:10 UTC -to- 10-Jan-93 00:30 UTC
13-Jan-93 00:35 UTC -to- 14-Jan-93 00:55 UTC
19-Jan-93 23:10 UTC -to- 20-Jan-93 23:45 UTC
26-Jan-93 23:30 UTC -to- 26-Jan-93 23:50 UTC

Mode JD operation will occur continuously Tuesday through Thursday.

* OSCAR SKN *

=====

Many thanks to all who participated in the 21st annual Straight Key Night on OSCAR, 1 January 1993. Please send your nominations for "Best Fist" worked to W2RS @ WA2SNA.NJ.USA.NA (or, from the UK, to W2RS @ GB7HSN) or by mail to W2RS at the Callbook address. Best wishes to all for 1993.

73, Ray W2RS

* STS-54 NEWS *

=====

Here is a set of preliminary launch elements for STS-54 that were posted to USENET by Mike Hartmann.

STS 54

1 00054E	93013.62838574	.00070000	00000-0	25599-3	0	12
2 00054	28.4620	152.5278	0004400	267.5660	92.4949	15.90925404

STS-54 is scheduled for launch at 1352 UTC on Jan. 13, 1993. These estimated TLEs are consistent with an on-time launch on the 13th and a normal trajectory through the TDRS-F deployment at an approx. MET of 00/06:14 over the North Pacific on Rev 5. The IUS-13 first stage burn would take place at the ascending node of Rev 6 at approx. MET 00/07:14. The second stage IUS burn would take place at the succeeding apogee at approx. MET 00/13:00.

[Info via Gary Morris, KK6YB]

* SAREX IN 1993 *

=====

There will be a total of three Shuttle Amateur Radio Experiment (SAREX)

missions flying in 1993. Shuttle missions STS-55 (February), STS-56 (March), and STS-57 (April) will all carry Amateur Radio equipment. A list of SAREX frequencies for these missions will appear in next week's issue of SpaceNews. Stay tuned!

[Info via KD4DLA]

* TNX DE KD2BD *

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Thanks to all who sent messages of appreciation to SpaceNews, especially:

N1MDZ KD4TXZ N7VCZ DU9EW KD9UL Bob Stetson

* FEEDBACK/INPUT WELCOMED *

=====

Mail to SpaceNews should be directed to the editor (John, KD2BD) via any of the following paths:

FAX : 1-908-747-7107
UUCP : ...catfish.ocpt.ccur.com!ka2qhd!kd2bd
PACKET : KD2BD @ NN2Z.NJ.USA.NA
INTERNET : kd2bd@ka2qhd.de.com -or- kd2bd@amsat.org

MAIL : John A. Magliacane, KD2BD
Department of Engineering and Technology
Advanced Technology Center
Brookdale Community College
Lincroft, New Jersey 07738
U.S.A.

<<-- SpaceNews: The first amateur newsletter read in space! -->>

/EX

--

John A. Magliacane	FAX : (908) 747-7107
Engineering & Technology Dept.	AMPR : KD2BD @ NN2Z.NJ.USA.NA
Brookdale Community College	UUCP : ...!rutgers!ka2qhd!kd2bd
Lincroft, NJ 07738 USA	VOICE: (908) 224-2948

Date: Sun, 10 Jan 1993 00:27:56 GMT
From: usc!sol.ctr.columbia.edu!eff!enterpoop.mit.edu!world!eac@network.UCSD.EDU
Subject: 1200Mhz is not a microwave band?
To: info-hams@ucsd.edu

In <fred-mckenzie-060193180152@k4dii.ksc.nasa.gov> fred-mckenzie@ksc.nasa.gov (Fred McKenzie) writes:

>By the way, these letter designations were apparently originated by the old
>Sperry Electronic Tube division, when they arbitrarily chose them to
>indicate the frequency range of their microwave tubes. This was probably

I heard the designations originated with the British military while doing Radar research during WWII. They jumbled up the letter sequence to confuse the Germans.

73 Eric. eac@world.std.com

Date: Sat, 9 Jan 1993 22:55:54 GMT
From: usc!rpi!isaac.its.rpi.edu!abelson@network.UCSD.EDU
Subject: Any Icom IC-3230 owners out there?
To: info-hams@ucsd.edu

I am looking for any mods you may know of for extended RX/TX for this radio.

Thanks.

73 de mla

Mike Abelson - Information Technology Services abelson@rpi.edu
Rensselaer Polytechnic Institute
Troy, New York 12180-3590 Amateur Packet: KB2KYZ @ WA2UMX

Date: 9 Jan 93 14:31:03 EST
From: usc!howland.reston.ans.net!zaphod.mps.ohio-state.edu!pacific.mps.ohio-state.edu!ohstpy!miavx1!miavx3.mid.muohio.edu!clmorgan@network.UCSD.EDU
Subject: CTCSS close
To: info-hams@ucsd.edu

In article <1993Jan7.183258.17573@tijc02.uucp>, eri316@tijc02.uucp (Ed
Ingraham) writes:
> All this discussion of closed vs open repeaters and CTCSS (which seems
> such an attractive solution) brings up the question:
>
> If two stations transmit at the same time on the input of a repeater,
> one with the CTCSS which the repeater uses and one without, what comes out
> of the repeater transmitter?

>
> If the CTCSS signal is stronger, he comes through. Otherwise, nothing. Right?
>
>
> Ed Ingraham, WX4S
> Siemens Industrial Automation, Inc.
> Johnson City, Tennessee
> tijc02!eri316@uunet.uu.net

A FM receiver typically responds to the strongest signal ... known, in some circles, as the capture effect.

'Nuff said?

73 >< Carl
K8NHE

Date: 9 Jan 93 21:33:27 GMT
From: news-mail-gateway@ucsd.edu
Subject: Daily Solar Geophysical Data Broadcast for 08 January
To: info-hams@ucsd.edu

!!BEGIN!! (1.0) S.T.D. Solar Geophysical Data Broadcast for DAY 008, 01/08/93
10.7 FLUX=132.9 90- AVG=139 SSN=144 BKI=2122 2223 BAI=007
BGND-XRAY=B3.4 FLU1=2.6E+06 FLU10=1.2E+04 PKI=3222 2233 PAI=009
BOU-DEV=019,006,012,014,018,018,017,024 DEV-AVG=016 NT SWF=00:000
XRAY-MAX= B9.5 @ 0127UT XRAY-MIN= B2.8 @ 2321UT XRAY-AVG= B4.2
NEUTN-MAX= +002% @ 2140UT NEUTN-MIN= -002% @ 1935UT NEUTN-AVG= -0.1%
PCA-MAX= +0.1DB @ 2345UT PCA-MIN= -0.4DB @ 0905UT PCA-AVG= -0.0DB
BOUTF-MAX=55421NT @ 0423UT BOUTF-MIN=55396NT @ 1946UT BOUTF-AVG=55414NT
GOES7-MAX=P:+107NT@ 1852UT GOES7-MIN=N:+003NT@ 2359UT G7-AVG=+076,+028,+009
GOES6-MAX=P:+128NT@ 1853UT GOES6-MIN=E:-013NT@ 2248UT G6-AVG=+094,-002,+037
FLUXFCST=STD:140,145,150;SESC:140,145,150 BAI/PAI-FCST=015,015,012/015,015,010
KFCST=3334 3333 3343 3333 27DAY-AP=006,006 27DAY-KP=3111 2222 2001 2222
WARNINGS=
ALERTS=**245STRM:0635-0735UTC
!!END-DATA!!

Date: Sat, 9 Jan 1993 20:45:00 +0000
From: pipex!demon!cix.compulink.co.uk!dplumb@uunet.uu.net
Subject: Undeliverable Messages
To: info-hams@ucsd.edu

What is it with this mailer "Info-Hams@UCSD.Edu" that has just put four huge

undeliverable messages? Why also are there so many other "Undeliverable Mail" and suchlike messages in this newsgroup?

I'm new to this newsgroup, does this kind of thing happen very often, is there not a solution to it? I will be rapidly un-joining if my downloads take 5 minutes longer than required each day!

Dave Plumb | Internet: dplumb@cix.compulink.co.uk | Fidonet: 2:252/140
London, UK | Packet : G7MIL @ GB7HSN.#32.GBR.EU | MO: 0000-0600 GMT

Date: Sat, 09 Jan 93 20:34:58 GMT
From: swrinde!zaphod.mps.ohio-state.edu!n8emr!gws@network.UCSD.EDU
Subject: VK2SG RTTY DX Notes for week ending 8 January, 1993 (BID RTDX0108)
To: info-hams@ucsd.edu

=====
| Relayed from packet radio via |
| N8EMR's Ham BBS, 614-895-2553 |
=====

SB DX @ ALLBBS \$RTDX0108
VK2SG RTTY DX Notes, 8 January
VK2SG RTTY DX Notes for week ending 8 January, 1993 (BID RTDX0108)

RTTY DX Notes were not planned for the week ending 25 December as the bulletin editors were with their families enjoying the holiday. Syd, VK2SG had planned to issue a bulletin for the week ending 1 January but was indisposed. Syd, we hope you are feeling and getting better.

A sampling of reports during Christmas week showed the following stations active on RTTY: SP3BGD, S59AM, IS0AWP, CN8NP, C9RTC, C9RJJ, ZF1WM, HK3SGP, ZP5FGS, OA4ZP, FG4FI, AL7BB, UW3AT, FG4FL, OD5PL, S79S, ON5AHB, P5RS7 (RTTY Slim!), 7P8SR, FM5DN, D68ZL, ES7JW, YL2KF, 0X3BV, A22BW, KL7K, OH0MFP, YN1DE, 5R8DG, KW2P/KP5, and ZS1CI.

Our thanks this week go to CE3GDN, IK5AAX, I5FLN, KC4CH, NT3B, OH2LU, WB2CJL, DJ3IW and the Central Europe DX-Clusternode DB0SPC, the NJ0M node of the Twin Cities DX Packet Cluster Network, and ZS5S. Thanks chaps.

1993 started off with fine conditions on New Years Day. We hope this is a good omen for the rest of the DX year.

Bandpass:

Friday 1

HAPPY NEW YEAR!

0924-28085 7P8SR
1012-28079 ES7AM
1044-21086 4L2FC
1141-21083 5N0RJM
1202-21079 7P8SR
1236-14087 UA9FGJ
1302-21090 KP2N
1415-14083 UC20CJ QSL to Vladimir N. Prihodko, Box 268,
Gomel 240270, Republic of Belarus
1511-21092 S58AA
1514-21091 0D5PL
1546-21086 OH0MFP QSL TO OH3MFP
1623-21089 YL1QO YL Op Nelly
1707-21082 5R8DG QSL via F6FNU - See note
1730-21091 EA8ATA
1740-14087 CN8NP
1741-21093 LY2ZZ QSL Box 71, Siauliai, Lithuania 5400
1746-21081 C9RJJ
1747-21080 KW2P/KP5 See Note
1752-21087 7P8SR
1857-21084 ZS6AWK
1910-21082 5R8DG QSX up 3.
1951-28090 CX4NF
2218-14084 7P8SR
2034-14087 VK2KM Long path East Coast USA
2325-14078 CX50W
2358-14089 AL7BB

Saturday 2

0051-14084 ZP6XD
0940-14082 OM3CPA See note
1150-14082 4L2FC
1330-21081 5R8DG
1425-21085 FM5WD
1430-21095 LY2ZZ
1440-28091 CP6RP
1548-21087 OM3HBS
1650-21081 5R8DG QSX 3 up
1827-21072 7Q7XX
1829-21074 HH2PK
1832-21082 ZD8LII
1847-21071 7P8SR
1914-28092 CX4NF
1944-28081 KP2N

1947-28080 ZD8LII
2020-21072 A22BW QSL via DK3KD
2118-21079 4M5RY QSL via YV5KAJ
2156-28076 ZP5JCY
2329-21090 KP2N
2357-7090 HP1XBH

Sunday 3
0641-14084 UH8EA
1202-14088 VS6W0
1300-21082 S75S QSL via I5JHW
1338-28093 FG5BG
1401-21093 A22BW
1418-21093 ZC4AB
1454-28092 3D2DM
1509-14082 UH8EA QSL via W5BWA
1536-21077 OK1MP
1548-21080 7Q7XX
1637-21083 VQ9CR
1745-21089 TR8KMJ
1759-21068 ZD8LII
1815-21089 XT2BW QSL via WB2YQH
1827-21081 5U7M
1842-21070 WH6I
1957-21084 A22MN
2142-14096 ZS6NW
2233-21085 AH6JF

Monday 4
0146-14082 LU4FD
1325-28083 5R8DG
2025-14073 XT2BW ARQ (Often uses 9X5LJ AMTOR MBO)

Tuesday 5
1130-21082 S75S
1235-21080 UL7PYB
1556-14085 4L2FC
1552-21087 C9RDM
1609-14083 YU7AM
1711-21085 5R8DG

Wednesday 6
1110-14083 YI1AL
1524-14089 S52KL
1526-14091 SV2BBK
1528-21086 OD5PL
1536-14083 UW9CX

Thursday 7
1429-21085 0D5PL
1705-21083 5R8DG

Notes of Interest:

As of 1 January, stations in the Republic of Slovakia started using the prefix, OM. The Czech Republic continues to use OK and OL.

George. 5R8DG is new to RTTY. He is learning how to operate split. Be patient with him as he sharpens his operating skills.

PITCAIRN IS. VR6 will be activated from the middle of January to the end of March by VR6JJ and VR6BB. QSL info later.

Next operation from WAKE ISLAND starts 21 January by KK4DK/KH9. He will be there for 2-3 weeks. QSL to OKDXA, Box 88, Wellston, OK 74881.

HOWLAND IS. KH1 will start 26 January for 7 days by ten operators on all bands and modes.

KINGMAN REEF, KH5K, and PALMYRA, KH5 will be activated by 12 operators for nine days starting around 5 March on all bands and modes.

BELAU, KC6 will be active from 10-28 February. Look for KC6SS, KC6RR, and KC6OK. QSL to PO Box 73, Owasso, OK 74055.

The KP5 team left a day earlier than planned after a successful multimode/multiband expedition. QSL all those /KP5 calls to N0TG, PO Box 891, DeSoto, TX 75123. Thanks for a job well done!

QSL cards for LZ2TU go ONLY to WB2RAJ. Logs are in hand for contacts from 9 June 1992 through 11 October 1992. Cards for earlier contacts will be accepted, but there will be a delay.

QSL FM5DN to POB 1134, 97249 Fort-de-France, French West Indies.

OH2BU promises that cards for the April/June 1992 4J1FS operation will start to go out this month.

S2/HA5BUS cards have been arriving, and some from FR5ZU/G and /E.

Send your bandpass and DX notes of interest for the week ending 15 January to I5FLN @ I5FLN.ITA.EU, @ ZS5S.NTL.ZAF.AF, @ 9X5LJ.RWA.AF, or I5FLN @ CE3GDN.#STG.CHL.SA.

Did you get a beam heading on the RTTY Slim who signed P5RS7 on

Christmas Eve? If so, let us know.

++++ F L A S H ++++

BE ON THE LOOKOUT FOR NEWS OF A POSSIBLE OPERATION FROM BOUVET ISLAND
SOMETIME IN APRIL-MAY 1993 BY RUSSIANS AND OTHERS SIGNING 3Y/R0L.

GL es 73 de Jules W2JGR @ CE3GDN.#STGO.CHL.SA

Thanks to N6EQZ for packet forwarding and editing labors.

/EX

--

Gary W. Sanders gws@n8emr.cmhnet.org, 72277,1325
N8EMR @ N8JYV (ip addr) 44.70.0.1 [Ohio AMPR address coordinator]
HAM BBS 614-895-2553 (1200/2400/V.32/PEP) Voice: 614-895-2552 (eves/weekends)

Date: 9 Jan 93 23:28:39 GMT
From: news-mail-gateway@ucsd.edu
Subject: Who posts RSGB News?
To: info-hams@ucsd.edu

Would the person who posts the RSGB News please send me mail; I have a couple of questions I'd like answered :-)

73 - Iain
G8SJP/G0RDI/C30DLA/AA2waiting_patiently
Spud.uxb1@rxuk.xerox.com

Date: 8 Jan 93 16:53:47 +1700
From: anomaly.sbs.risc.net!root@uunet.uu.net
Subject: Yaesu FT-5100 Help
To: info-hams@ucsd.edu

Organization: Small Business Systems, Incorporated, Smithfield, RI 02917
Date: Thu, 07 Jan 1993 22:16:14 GMT
Message-ID: <1993Jan07.221614.29150@anomaly.sbs.com>
Sender: root@anomaly.sbs.com (Anomaly System Administration)
Lines: 6

I just got a new Yaesu FT-5100 and was wondering why in all the ads for it Yaesu says it has cross-band repeat built in but there's no mention of it whatsoever. Weird stuff. Anyone know anything about this?

Tony

Date: 9 Jan 1993 16:54:04 -0600
From: usc!cs.utexas.edu!tamsun.tamu.edu!tamsun.tamu.edu!news@network.UCSD.EDU
Subject: Yaesu FT-990 mods, etc.
To: info-hams@ucsd.edu

Does anyone have any mods or undocumented features for the FT-990? Also, any general comments, suggestions, hints, etc. would be greatly appreciated.

Thanks and 73,

Brandon KB5WDR

Date: 10 Jan 93 03:01:33 GMT
From: usc!cs.utexas.edu!ut-emx!oo7@network.UCSD.EDU
Subject: YX0AI
To: info-hams@ucsd.edu

According to the latest issue of QRZ-DX, a new route for YX0AI cards is YX0AI-YV5ARV, 3180 Leewood Terrace, L-208, Boca Raton, FL 33431. Cards sent there will be processed in YV eventually (hand-carried?), so don't include US postage. I would assume that a \$\$ contribution, at least to cover the return airmail, would be appropriate. Cards that arrived without the \$\$ or IRCs enclosed are being answered via the bureau. 4M0ARV cards can be sent to the above address as well.

Derek Wills (AA5BT, G3NMX)
Department of Astronomy, University of Texas,
Austin TX 78712. (512-471-1392)
oo7@astro.as.utexas.edu
oo7@emx.utexas.edu

End of Info-Hams Digest V93 #43
